



# Fort Campbell Water Quality Report – 2002

TN PWSID # 000820, KY PWSID #0241001

## Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 85 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 12 of these contaminants and all were found at safe levels.

## What is the source of my water?

Your water, which is a ground water aquifer located on post. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. A wellhead protection plan is available for your review by contacting James Evans, Fort Campbell's WTP between 7:30 AM and 4:00 PM.

## Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**For more information about your drinking water, please call James Evans, Water Treatment Manager, 798-4926.**

**Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.**

## How can I get involved?

Contact the Water Treatment Plant (Jim Evans) at 798-4926.



## Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

## Other Information

We at Fort Campbell work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. The changing mission of the 101<sup>st</sup> and an increase in tenant units has resulted in growth in both the number of personnel served as well as geographic spread from the original 1940's construction. Both the plant and distribution system have grown and have been managed to meet these challenges.

The Fort Campbell water system is proud of the professionalism of its staff. Five operators are Grade IV (the highest grade) Water Treatment Plant Certified Operators in the state of Tennessee. The staff is also active with AWWA (American Water Works Association) and TAUD (Tennessee Association of Utility Districts) to maintain its knowledge of water issues and regulatory changes.

The Fort Campbell Water Plant has been rehabilitated over the last several years to update the treatment processes. Efforts are constantly on going to improve the water distribution system and water storage facilities across post.

Tours of the Water Plant may be arranged by contacting Jim Evans at 798-4926. School groups are welcomed.

## Water System Security

Following the events of September 11, 2001, we realize that our customers are concerned about the security of their drinking water. Unlike many municipal utilities, our water source is on post and protected by Post Security. We urge all residents of Fort Campbell to report any suspicious activities at any utility facilities, including the water treatment plant, storage tanks, fire hydrants, etc. to 798-7111, 7112 or 7113.

## Do I need to take extra precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone

organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but also food preparation, personal hygiene, and precautions in handling infants and pets

from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## W a t e r   Q u a l i t y   D a t a

### What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL** - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- **<** symbol indicates less than. Trace amounts may be present. However detection technology is not capable of giving a reading below certain limits.

Most of the data presented in this table is from testing done between January and December of 2002. Fort Campbell routinely tests on a yearly basis for over 85 inorganic and organic chemicals and physical properties. This table represents only those items for which a detection was noted or which we are required to list in this table, i.e. coliform.

Contaminant	Violation Yes/No	Level Detected	Range of Detection	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	N	0				0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Turbidity <sup>1</sup>	N	0.47			NTU	N/A	TT	Soil runoff
Asbestos	N	<0.193		2001	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Beryllium	N	<2			ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Copper	N	0.424	0.003-1.072	7/02	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	0.9	0.5-1.1		ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Lead <sup>2</sup>	N	1.16	0.5-3.6	7/02	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) <sup>3</sup>	N	1.1			ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	<5			ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	3.5	2.9-3.9		ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM [Total trihalomethanes]	N	12.1	5.1-18.6		ppb	0	100	By-product of drinking water chlorination
THAA [Total haloacetic acid]	N	5.0	<0.5-28.6		ppb	0	60	By-product of drinking water chlorination

During the most recent round of Lead and Copper testing (required every three years), 0 out of 30 households sampled contained concentrations exceeding the action level and this water is considered safe.

Monthly total organic carbon (TOC) measurements are taken from the raw water and finished water (after treatment). These values were nondetectable (<1.0 ppm) in the raw and the finished water for each of the monthly samples. If detected, the majority of organic carbons that are found in ground water samples are naturally occurring and do not represent a health risk.

#### *Microbiological Contaminants:*

**Total Coliform.** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

**Turbidity.** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Regulatory requirements are that 95% of the samples per month must be below 0.5 NTU. In addition, no turbidity reading may be above 5.0 NTU. Turbidity samples are collected every 4 hours.

<sup>1</sup>100% of our samples were below the turbidity limit, 99.5% of samples were <0.3 NTUs.

<sup>2</sup>Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

<sup>3</sup>Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.